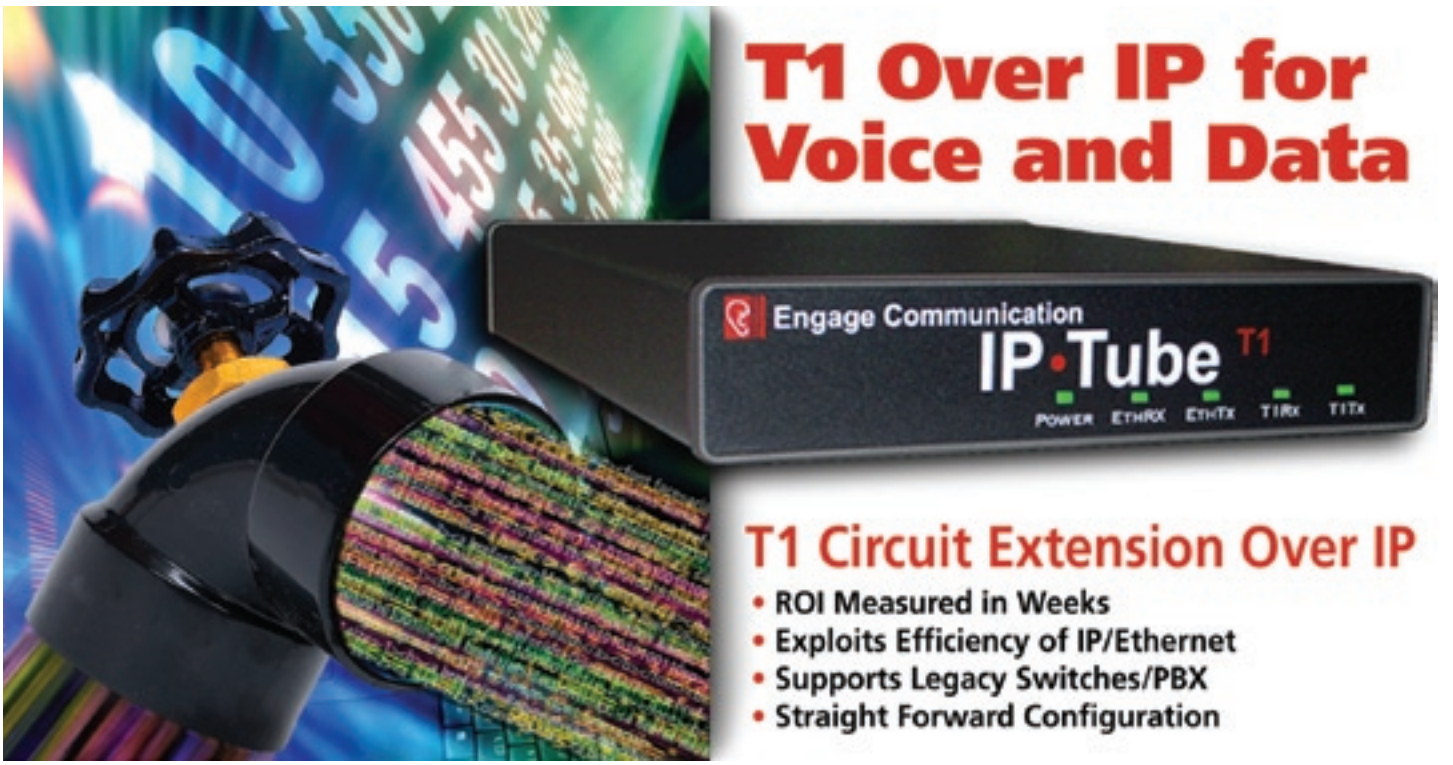
Engage Communication

IP•Tube T1



T1 to IP Packets and back

The **IPTube-T1** encapsulates full and fractional T1 and TDM circuits, along with their framing and signaling bits, into IP packets. The **IPTube's T1** Over IP, T1 Over Ethernet connection provides for the transparent interconnection of PBXs, Telecom Switches and T1 based communication systems via LANs, WANs, MANs, and Wireless Ethernet.

Transparent Interconnect

IPTube-T1 transparent operation maintains the proprietary signaling required to support PBX features such as call conferencing, call forwarding, caller ID and SS7. Legacy phone equipment investment is preserved. Transparent support for Modem, Fax, or Data circuits. The IPTube-T1 has a T1 interface that connects directly to the T1/DS1 interface of Phone Systems or T1 Data Communication Equipment.

International Toll Bypass

The **IPTube-T1's** most dramatic cost savings is when it is used for the international interconnections of TDM based telecommunication equipment. The IPTube-E1 is interoperable with the European TDM standard E1.

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IP•Tube T1

T1 Private Line Services over IP

Businesses incur significant recurring monthly costs for rigid-bandwidth leased lines used purely for the interconnection of PBXs and telecom switches. The IPTube-T1 provides enterprises with the ability to interconnect their existing phone systems over flexible bandwidth lines that are used to carry data, voice, and video. The Voice Only Leased Line Toll charges assessed by long distance and local carriers are eliminated by transporting voice and fax traffic across the enterprise intranet, LAN, Metropolitan-Area Network, or WAN.

- Branch Office Interconnect of Phone System over WAN
- Education District Networking of Phone Systems

Lossless Data Compression

The **IPTube-T1C** detects idle/redundant data within each DS0 resulting in a 56 to 1 bandwidth savings. TDMoIP bandwidth is not consumed by silent or redundant circuits. Management of the **IPTube-T1** is accomplished with a Command Line Interface that is accessed through a Console or Telnet connection. Common templates provide for cut and Paste configuration.

Technical Specifications

LAN Network Interface:
• 10BaseT Ethernet

LAN Network Protocols Supported:
• IP, TCP, UDP, ICMP, BOOTP

T1 Over IP Protocol:
• TDM Over IP - TDMOIP
• Circuit Extension Services Over IP - CESOIP
• HDLC Over IP - HDLCOIP
• Frames Per Packet Configurable 8 to 56
• Low Latency Mode: 1 millisecond 8 T1 frames
• Max Payload Mode: 5 millisecond 56 T1 frames

Regulatory:
• Safety -IEC60950 • EMC - CFR 47 Part 15 Sub Part B:2002, EN55022:1994+A1&A2, EN55024, ICES-003 1997 CISPR 22 Level A • Telecom - Part68 • CE

Quality of Service Support:
• IP Type of Service (TOS) CLI configurable
• IANA Registered UDP Port 3175

TFTP Online Upgrade Capable (FLASH ROMs)
• IPTube is fully operational during upgrade

Management:
• Telnet support with Edit and Paste Template Files
• Console Port for Out of Band Management
• SNMP support (MIB I, MIB II)
• Remote configuration, monitoring, & reset

Dimensions:
• 9" (L) x 7.3" (W) x 1.50" (H)

Power:
• 12/24 VAC/DAC, 1.0A • Optional 12-36 VDC 1.0A
• Optional -48V 0.25 Amp (International Adapters Available)

Rear Panel AC
Telco: T1/DS1 Interface for connection to a PBX,telecom switch/multiplexor.
Console: Standard 10BaseT Ethernet interface Port Connector
• RJ 45 to DB 9 Male Adapter.

How to Order — IP•Tube T1

Part No.	Description	Notes
040-1544	IP•Tube T1	Single T1 Port
042-1444-C	IP•Tube T1-Compression	w/Lossless Data Compression Option
090-0100	Cable, Console - Assembly	Standard Item IP-Tube Family
091-0200	Cable, T1/E1 Crossover	Standard Item IP-Tube Family
094-2418	Power Supply, 110V AC	Standard Item IP-Tube Family
094-N48V	Power Supply, -48V DC Int. Adapter	Optional
095-1000	Rack Mount Kit	Optional

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